

Health of Home and School.

LEAFLET NO. 8.

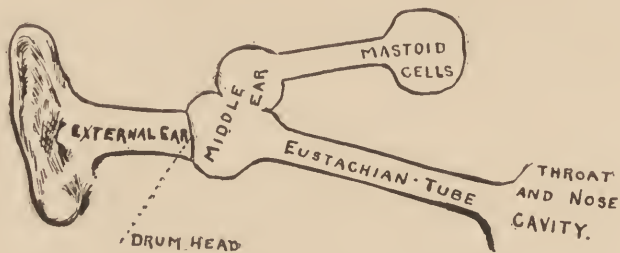
ISSUED BY THE STATE BOARD OF HEALTH OF MAINE.

Troublesome and Dangerous Ear Diseases.

People generally have but little idea of the unfortunate results and of the dangers which very often follow earache, inflammation of the ear, and "runnings" from the ear when neglected. That is why this leaflet is prepared.

Structure of the Ear.

That part of the ear which stands out from the side of the head and collects the sound waves is a useful part, but not the essential part of the organ of hearing. This diagram does not pretend to show correctly the shape of the internal structures of the ear, but it does, better than a correct picture would, give an idea of the relation of the various parts to one another and to the throat and nose. It does not show at all those parts which form the internal ear.



The outer passage of the ear, about an inch inward, is closed by a membrane stretched tightly like a drumhead. It is, indeed, called the drumhead of the ear. The cavity beyond that is called the drum of the ear or the "middle ear." It has no outward communication except with the upper cavity of the throat and nose through the Eustachian tube. Beyond the drum is the third cavity, called the "internal ear." The nerve of hearing is distributed within this.

Troubles of the Outer Ear.

Insects may crawl into the ear. When they do so their fluttering or scratching against the drumhead of the ear causes such a noise and so unpleasant a sensation as wildly to excite the child. Warm water or sweet oil poured into the ear drowns the insect and floats it out.

Foreign bodies lodged in the ear are not nearly so dangerous as unskillful efforts at their removal, which often cause rupture of the drumhead or partial or complete destruction of hearing in that ear. Their removal is work for the physician.

Boils sometimes form in the skin which dips down into the outer ear passage. They are often very painful. They and other troubles of the external ear are sometimes caused by the use of the ear scoop, toothpicks, hairpins, or other things used in the outer passage of the ear. With such things the outer passage of the ear may be infected or the drumhead of the ear may easily be injured or even ruptured. Never use anything in your ear or scratch it with anything but your elbow, is the good advice which the old doctor gave.

Diseases of the Middle Ear, (the Drum of the Ear).

Diseases of the middle ear usually result from unhealthy conditions of the throat or nose. Adenoids or enlarged tonsils may be the cause, or a chronic catarrhal process which may extend to the Eustachian tube. Closure of that tube removes the air pressure from the inner surface of the drum-head, while the pressure from the outside continuing, bulges the drumhead inward and hardness of hearing results.

Acute Inflammations.

But the main purpose of this leaflet is to tell about some acute troubles which endanger life as well as hearing.

The inflammation of the nose and throat caused by a severe cold or by an attack of the grip may extend upward through the Eustachian tube to the middle ear. When that occurs the inflammation of the lining of the tube often closes the passage through it so that the purulent or other fluids forming in the middle ear cannot escape into the throat. The pressure of these pent-up secretions often breaks through the drumhead and the fluids are discharged externally. These "risings in the head" or "abscesses in the head," as the trouble is sometimes called, should be regarded as a serious matter. The severe earache may cease as soon as the rupture and discharge takes place, but the danger continues. But it should be remembered that infants may have serious inflammations of the middle ear without indicating the fact by crying. Right back of the ear is a bony prominence, the "mastoid process." It contains cavities or cells which are connected with the middle ear; and the inflammation often extends from the middle cavity of the ear to those cells. And these cells are close to the base of the brain. The great danger to life is the extension of the inflammation to the brain or its membranes.

When the inflammation of the mastoid cells occurs, a serious surgical operation is often required to save life; but in the greater number, this operation is not done and life is lost by the extension of the inflammation to the coverings of the brain, or by abscess of the brain, or by disease caused by the extension of purulent or infectious matter to other parts. This happens so frequently because parents do not understand how great the danger is.

And just as long as a discharge from the ear goes on, this serious danger hangs over the child; and the discharge is more and more destroying the hearing.

Greatest Cause of These Troubles.

A common cold may start this chain of disastrous results; but the great sources of it are the infectious diseases, particularly measles, scarlet fever, diphtheria and grip; though the infection which lights up these dangerous ear troubles may be that of whooping cough, mumps, pneumonia, erysipelas, tuberculosis, or smallpox.

During an attack of any of these diseases, particularly of any of the four first mentioned, great care should be taken to prevent the extension of the infection to the middle ear.

The infection may be blown directly in through the Eustachian tube by blowing the nose. Hence the urgent need of cautioning the patient to abstain from acts which may cause so much trouble.

The inflammation is not so likely to extend to the ear if the throat and nostrils, in infectious attacks, are kept clean with mildly antiseptic washes; but if applied with the nasal douche, there is extreme danger of the fluids penetrating to the cavity of the middle ear, thus carrying infection; and this danger is not wholly absent in using some of the hand sprayers. This treatment should be under the supervision of the attending physician.

Please save these leaflets so you may have a full set of them for reference. Many more are to be printed.